

Backing for 750 TPD Novus Energy High Speed
Digester in Oregon

\$11m USDA Loan Guarantee for 4 Day Organic Waste Digestion Tech

Novus Energy, has secured an \$11 million federal loan guarantee from the United States Department of Agriculture (USDA) to help it build a new biorefinery plant.

By [Ben Messenger](#)

Friday 14:26



Minneapolis based organic waste to energy firm, Novus Energy, has secured an \$11 million federal loan guarantee from the United States Department of Agriculture (USDA) to help it build a new biorefinery plant.

The company explained that Rural Development Under Secretary, Lisa Mensah, pledged federal support for the Boardman, Oregon plant in the Port of Morrow.

[Novus](#) was chosen among six finalists for the loan guarantee from the USDA in its Biorefinery, Renewable Chemical and Biobased Product Manufacturing Assistance Program.

“This biorefinery will spur economic development, create new jobs and provide new products for farm commodities in rural Oregon,” explained Mensah.

This is only the second time the USDA has offered such assistance loans, funded by the 2014 Farm Bill.

“This will help us in the financing of this ground-breaking project, and also create economic development in both areas of the country,” commented Novus Energy president and CEO Joe Burke.

“We’ve been working on this project for over three years,” Burke said. “Our selection into this program validates our technology - this is an accelerator for us.”

He added that securing the debt for the project with the USDA loan helps Novus stay on track to break ground for the plant in 2016 and get production under way next year.

The Novus Pacific project, as it's called, is projected to create a total of about 55 jobs in its construction phase.

Technology

The \$22 million dollar five-acre plant will apply the company's Novus Bio-Catalytic System (NBC™) to convert non food organic materials into renewable natural gas (methane) and organic fertiliser.

According to the company its Bio-Catalytic Conversion System is an integrated, bio-catalytic process that converts organic feedstocks to a spectrum of high value products in one streamline, turn-key operation. The proprietary process is said to convert waste into valuable products and recovers clean water while eliminating pollution.

The company explained that organic solid feedstocks, such as potato peels, straw, corn stover are difficult to digest through standard anaerobic digestion. However, Novus claimed that it is able to do this in a fraction of the time as compared to traditional digesters.

"Our technology produces gas in 4 days instead of 15 to 20 days and we convert 90% of the organics rather than the 50% to 60% percent industry average," claimed Burke.

The NBC System is said to achieve this through its patented biological process and unique engineering design. The process accelerates the digestion of complex organic molecules by employing a unique consortium of anaerobic bacteria that are claimed to be able to overcome hurdles faced in conventional digestion.

The process is said to enable a plant to realise significantly higher conversions in smaller volumes while producing clean biogas, water and fertiliser.

The Novus Pacific facility is expected to process up to 750 tons per day of non-food organic waste, producing up to 3.8 million cubic feet (108,000 cubic metres) of renewable natural gas per day, 350 gallons (1325 litres) of liquid fertiliser daily and 11 tons (10 tonnes) per day of soil amendment.